Patricia M. French Senior Attorney



300 Friberg Parkway Westborough, Massachusetts 01581 (508) 836-7394 (508) 836-7039 (facsimile) pfrench@nisource.com

July 10, 2005

#### BY OVERNIGHT DELIVERY AND E-FILE

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 05-27

Dear Ms. Cottrell:

Enclosed for filing, on behalf of Bay State Gas Company ("Bay State"), please find Bay State's responses to the following information requests:

#### From the Attorney General:

AG-6-11 BULK<sup>1</sup> AG-23-3 AG-23-6 (Revised)

### From the Department:

DTE-3-10 (Supp) DTE-3-17 DTE-3-19 DTE-15-55 DTE-15-56

DTE-15-57 DTE-16-29 DTE-20-3

#### From the MASSPOWER:

MP-1-13

### From the UWUA:

UWUA-1-1 UWUA-1-8 UWUA-1-13 UWUA-1-16 UWUA-1-17

UWUA-1-20 UWUA-3-48

-

<sup>&</sup>lt;sup>1</sup> Due to the size of this bulk response (i.e., one complete box per set), the Company is only shipping one hard copy to the Department and the Attorney General.

Please do not hesitate to telephone me with any questions whatsoever.

Very truly yours,

Patricia M. French

cc: Per Ground Rules Memorandum issued June 13, 2005:

Paul E. Osborne, Assistant Director – Rates and Rev. Requirements Div. (1 copy) A. John Sullivan, Rates and Rev. Requirements Div. (4 copies) Andreas Thanos, Assistant Director, Gas Division (1 copy) Alexander Cochis, Assistant Attorney General (4 copies) Service List (1 electronic copy)

# RESPONSE OF BAY STATE GAS COMPANY TO THE SIXTH SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

### **BULK ATTACHMENTS**

AG-6-11 Produce copies of all exposed pipe inspection records from 1995 to 2004.

Response: See Attachment AG-6-11.

# RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY-THIRD SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

AG-23-3

Please refer to the June 17, 2005, letter from the Company to the Attorney General regarding overdue discovery responses, p. 3. List what categories of data are maintained in the Compliance Management System ("CMS"). List what types of reports are available from the CMS. For the years 1990 to 2005, produce all reports related to leaks on unprotected bare steel services. For the years 1990 to 2005, produce all reports related to leaks on unprotected coated steel services. For the years 1990 to 2005 produce all reports that indicate the Company is not in compliance with code.

Response:

Attachment AG-23-3 lists the types of reports available in CMS. The CMS does not track leak history. Leak history and leak repairs are tracked in the Company's Work Order Management System (WOMS) by cause of leak (e.g., corrosion, third party, outside force, construction defect, material defect and other) not by pipe type. Therefore leaks by pipe type are not available. The Company has provided in response to AG-6-12, copies of all Notice of Probable Violations for the period between January 1, 1995 and December 31, 2004.



Program Name: R-CMS800.P

Program Title: **Technician Worksheet** 

Program Type: Multiple Entity

Program Summary: Prints a worksheet, sorted by address, that the technicians can use

in the field. After the data is entered on the worksheet, figures can

later be entered into the database.

### Parameter Map:

Parameter Label Database Field

(1) Division Division Code
(2) Test Base Test Code
(3) Street Prefix Address.Pre\_Dir\_Cd
(4) Street Name Address.Street

(5) Street Suffix Address.Street\_Suffix\_Cd

(6) Town Address.Town\_Cd
(7) Group ID Entity\_Test.Group\_ID
(8) From Date Entity\_Test.Next\_Test\_Date
(9) To Date Entity\_Test.Next\_Test\_Date

\_\_\_\_\_

Program Name: R-CMS801.P

Program Title: Compliance Testing Outstanding Repairs

Program Type: Multiple Entity

Program Summary: Prints a report listing outstanding repairs made as a result of a

chosen test and within a chosen date range. The report can be

printed in either summary or detail fashion.

Parameter Map:

Parameter Label Database Field

Bay State Gas Company D.T.E. 05-27 Attachment AG-23-03 Page 2 of 8

(1) Report Type Detail/Summary

(2) Division Entity\_Test.Division\_Cd
(3) Test Entity\_Test.Base\_Test\_Key
(4) From Date Test\_Detail.Test\_Date
(5) To Date Test\_Detail.Test\_Date

(6) Status Not Referenced

(7) Action Test\_Detail.Test\_Action\_Cd

\_\_\_\_\_

Program Name: R-CMS802.P

Program Title: **Performance Measurements** 

Program Type: Multiple Entity

Program Summary: Prints a report listing performance measurements. The report

shows how many CMS work orders of a given type were completed before their "compliance" date. For those CMS work orders that generated WOMS work orders, figures are also displayed showing how many of the WOMS work orders were

created before the CMS compliance date.

Parameter Map:

Parameter Label Database Field

(1) Division Entity\_Test.Division\_Cd
(2) Test Entity\_Test.Base\_Test\_Key
(3) From Date Test\_Header.Cycle\_Date
(4) To Date Test\_Header.Cycle\_Date

Program Name: R-CMS803.P

Program Title: Service List

Program Type: Services

Program Summary: Prints a report showing numbers of services in a user chosen

status. The report may be printed in either a summary or a

detail form. The summary form lists only statistics.

The detail form also lists addresses.

### Parameter Map:

Parameter Label Database Field

Summary/Detail (1) Report Type

(2) Spacing Double Space/Single Space (3) Division Service.Division Cd (4) Street Prefix Address.Pre Dir Cd (5) Street Name Address.Street OR

Service.Svc\_Entry\_Street

Address.Street Suffix Cd (6) Street Suffix Service.Town\_Cd OR (7) Town

Service.Svc Entry Town Cd

Service\_Pipe.Pipe\_Typ\_Cd (8) Pipe Type

(9) Status Service.Svc Stat Cd (10) Starting Status Date Service.Svc Stat Dt (11) Ending Status Date Service.Svc\_Stat\_Dt (12) Starting Cutoff Date Service.Cutoff Dt (13) Ending Cutoff Date Service.Cutoff Dt (14) Starting Install Date Service\_Pipe.Inst\_Dt (15) Ending Install Date Service Pipe.Inst Dt

Program Name: **R-CMS804.P** 

Program Title: Monthly CMS Status Breakdown

Program Type: Multiple Entity

Program Summary: Prints a status report showing the number of tests that fall in each

month for each test status (ie. passed, failed, not tested, initiated).

Also listed are the breakdowns for any "reasons".

#### Parameter Map:

Database Field Parameter Label

(1) Division Entity\_Test.Division\_Cd (2) Test Entity\_Test.Base\_Test\_Key (3) From Date Test Header.Next Cycle Date (4) To Date Test\_Header.Next\_Cycle\_Date

Program Name: R-CMS805.P

Program Title: Rectifier Test History

Program Type: Rectifiers

Program Summary: Prints a sheet for each rectifier showing both general information

on the rectifier and a history of readings taken from the rectifier.

Parameter Map:

Parameter Label Database Field

(1) Division Rectifier.Division\_Cd
(2) Test Entity\_Test.Base\_Test\_Key

(3) Town Rectifier.Town\_Cd
(4) Rectifier ID # Rectifier.Rectf Key

\_\_\_\_\_

Program Name: R-CMS806.P

Program Title: Rectifiers with Related Mains

Program Type: Rectifiers

Program Summary: Prints a sheet for each rectifier with related mains. The

report displays general information on the rectifier and the related main. Under the main are listed the lengths of pipe which are

protected and unprotected.

Parameter Map:

Parameter Label Database Field

(1) Division Rectifier.Division\_Cd
(2) Town Rectifier.Town\_Cd

Program Name: R-CMS807.P

Program Title: **Public Building Sheets** 

Program Type: Public Buildings

Program Summary: Prints a sheet for each public buildings. The report

displays general information on the public building and, in the case of the detailed version, information on any related service and any

readings needed.

Parameter Map:

Parameter Label Database Field

(1) Report Type Summary/Detail

(2) Division Public\_Bldg.Division\_Cd
(3) Town Public\_Bldg.Town\_Cd

(4) Public Building Status(5) Public Building TypePublic\_Bldg.Public\_Bldg\_Typ

Program Name: R-CMS808.P

Program Title: **Public Building Listing** 

Program Type: Public Buildings

Program Summary: Prints a listing of public buildings.

Parameter Map:

Parameter Label Database Field

(1) DivisionPublic\_Bldg.Division\_Cd(2) TownPublic\_Bldg.Town\_Cd

(3) Public Building Status Public\_Bldg\_Public\_Bldg\_Stat\_Cd
(4) Public Building Type Public\_Bldg\_Public\_Bldg\_Typ

Program Name: R-CMS809.P

Program Title: Services w/Mult Pipes and Protected CS

Program Type: Services

Program Summary: Prints a listing of any services with multiple service\_pipe

records one or more of which is coated steel (CS) under

protection.

Parameter Map:

Parameter Label Database Field

(1) Division Services.Division\_Cd(2) Town Services.Town\_Cd

Program Name: R-CMS810.P

Program Title: Service Retirement Compliance Report

Program Type: Services

Program Summary: This report prints the total of service retirements and shows BSG's

performance for in-compliance, out-of-compliance and also work

that still needs to be done related to svc retirements.

Parameter Map:

Parameter Label Database Field

(1) Report Type
 (2) Division
 (3) Cutoff Year
 Detail / Summary
 Service.Division\_Cd
 Service.Cutoff Date

Program Name: R-CMS811.P

Program Title: Meter Shop Audit Report

Program Type: Meters and AMDs

Program Summary: Report is used for verifying marriage information processed

through the meter shop (s).

Parameter Map:

Parameter Label Database Field

(1) Pallet to Audit Inv\_Loc\_Dtl.Pallet\_No

Program Name: R-CMS812.P

Program Title: **Post 1971 CS Pipe w/o Corrosion Test** 

Program Type: Services

Program Summary: Program receives a division code parameter and searches for all

services with coated steel pipe, a pipe year greater than or equal to

1971, and the "under protection" indicator set to false.

Parameter Map:

Parameter Label Database Field

(1) Division Service.Division\_Cd

Program Name: R-CMS860.P

Program Title: **Instrument Listing** 

Program Type: Instruments and Meters

Program Summary: Prints a listing of large volume instruments and associated meters.

Parameter Map:

Parameter Label Database Field

(1) DivisionMeter\_Site.Division\_Cd(2) Instrument ModelInstrument.Instrm\_Model\_Cd

(3) Meter Model Meter.Mtr\_Model\_Cd

(4) Sort By Customer, Calibration Date, Meter Install

Date, Address, Meter Model

# RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTY-THIRD SET OF INFORMATION REQUESTS FROM THE ATTORNEY GENERAL

D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

#### **REVISED**

AG-23-6

Please identify by name, address, telephone number the contractor that was responsible for installing the unprotected coated steel mains that Company has replaced since 1990 in Brockton and Lawrence, and identify by name, address, telephone number the contractor that was responsible for the replacing these mains. Produce copies of the contract for the installation services.

Response:

Bay State does not have copies of installation contracts from the 1950's and 1960's when this coated unprotected pipe was installed. However, the Work Order Management System ("WOMS") captures the name of the contractor that is responsible for installing the main, but not the address or phone number. Phone numbers and addresses regarding installation contractors come from a different database (i.e., the Lawson system). See Table AG-23-06 for a list of the contractors responsible for replacing Bay State's mains since 1990.

#### **Table AG-23-06**

Contractor Name	Address	Phone #
East Bay	495 Winthrop St Rehobeth, MA 02769	(508)336-5294
N.E. Utility	145 Spring St. Everett, MA 02149	(617) 389-5500
R.H. White	P.O. Box 257, Auburn, MA 01501	(508)832-3295
R.J Devereaux	10 Emerson Pl., Boston, MA 02114	(617) 742-3830
Universal	P.O. Box 487, W.Bridgewater, MA 02379	(508) 583-5352
AGI Construction	P.O. Box 17247, Smithfield RI 02917	(401) 233-0021
Kudlic Brothers	491B Springfield St. Feedhills, MA 01013	(413) 786-6452

Northern Pipeline	6310 Cove Ave.,	(410) 355-1083
	Baltimore MD 21226	
Trafford Construction	550 Fifth St Ext.	(800) 422-9330
	Trafford, PA 15085	
Dilorenzo	P.O. Box 759 Everett,	(617) 387-1101
	MA 02149	

# RESPONSE OF BAY STATE GAS COMPANY TO THE THIRD SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

#### SUPPLEMENTAL RESPONSE

DTE-3-10 Refer to Exh. BSG/DGC-1, at 10-14. Please provide for the years 1985 through 2004 the following:

- the lengths of mains by type of pipe (e.g., cast iron, wrought iron, bare steel, coated steel, cathodically protected steel, plastic) in the Brockton, Lawrence, and Springfield service areas, as well as the Company-wide totals;
- the lengths and costs of non-discretionary replacement mains installed by type of pipe in the Brockton, Lawrence, and Springfield service areas, as well as the Company-wide totals;
- 3) the lengths and costs of discretionary mains installed by type of pipe in the Brockton, Lawrence, and Springfield service areas, as well as the Company-wide totals.

Response:

Please see Attachment DTE-3-10(a), Attachment DTE-3-10(b), Attachment DTE-3-10(c) and Attachment DTE-3-10(d) for the requested information.

Please note that the data sources for Attachments DTE-3-10(a) – (d) are the RSPA F7100.1-1 Distribution System Annual Reports and associated worksheets, called Part B-1. Historically Bay State has reported its three Division service territory data in the aggregate. Instructions for completing the F7100.1-1 reports require the operator to report all figures as whole numbers, and not use decimals or fractional numbers. In addition, decimals and fractions are required to be rounded up or down to the nearest mile. Consequently, occasionally there is one-mile disparity between Division data and consolidated (Bay State-total) data for some pipe type categories.

In compiling the data requested in order to respond to DTE 3-10(1), Bay State discovered that for calendar years 1985, 1986 & 1987, there were disparities between the individual Division data and consolidated Bay State data with regard to the reported miles of unprotected bare steel and unprotected coated steel. Bay State's review of the source data resulted in a determination that the disparity resulted from numbers reported for the Lawrence division in 1985, 1986 & 1987. In addition, for calendar

year 1993, Bay State accounted for 1722 miles of cathodically protected coated steel main; the correct number was 1704 miles, based upon data from individual Division worksheets.

### **SUPPLEMENTAL RESPONSE:**

For DTE-3-10 (2), please see Attachment DTE-3-10 (e) and for DTE-3-10 (3) see Attachment DTE-3-10 (f). This information was inadvertently omitted from the original response dated May 31, 2005.

Bay State Gas Historical Mains Data 1985-2004

all bsg

Year	Unprotected Bare Steel	Unprotected Coated Steel	Cathodically Protected Bare Steel	Cathodically Protected Coated Steel	Plastic	Cast & Wrought Iron	Total Miles of Main
1985	636	654	0	1488	64	1005	3847
1986	623	649	0		120		
				1500		1003	3895
1987	615	639	0	1509	144	1000	3907
1988	721	562	0	1477	277	997	4034
1989	700	536	0	1524	345	992	4097
1990	688	511	0	1558	402	988	4147
1991	677	468	0	1600	467	979	4191
1992	648	440	0	1650	542	976	4256
1993	638	390	0	1722	613	958	4321
1994	624	362	0	1738	696	943	4363
1995	607	319	0	1781	758	936	4401
1996	593	182	0	1925	821	921	4442
1997	580	161	0	1950	886	910	4487
1998	562	143	0	1976	952	897	4530
1999	551	139	0	1985	1012	889	4576
2000	543	133	0	1994	1063	881	4614
2001	534	131	0	1995	1110	874	4644
2002	527	112	0	2012	1140	869	4660
2003	506	109	0	2024	1177	867	4683
2004	477	106	0	2034	1255	846	4718

Filename: DTE 3-10 (1) Bay State.xls

Worksheet: Bay State

**Brockton Division** Historical Mains Data 1985-2004

BR mains (data source are DOT worksheets)

Year	Unprotected	Unprotected	Cathodically	Cathodically	Plastic	Cast &	Total
	Bare	Coated	Protected	Protected		Wrought	Miles of
	Steel	Steel	Bare Steel	Coated Steel		Iron	Main
1985	480	331	0	980	26	296	2113
1986	470	328	0	990	61	296	2145
1987	463	327	0	995	101	295	2181
1988	453	324	0	1008	145	294	2224
1989	447	303	0	1038	191	293	2272
1990	437	277	0	1066	221	292	2293
1991	429	236	0	1107	259	289	2320
1992	419	201	0	1145	301	287	2353
1993	412	154	0	1193	341	283	2383
1994	404	130	0	1220	385	281	2420
1995	389	86	0	1267	424	279	2445
1996	378	70	0	1287	462	273	2470
1997	370	73	0	1288	500	271	2502
1998	357	80	0	1285	540	265	2527
1999	346	79	0	1290	572	261	2548
2000	338	76	0	1293	604	259	2570
2001	331	74	0	1294	636	256	2591
2002	327	72	0	1294	653	254	2600
2003	320	70	0	1296	674	254	2614
2004	305	63	0	1306	722	256	2652

Filename: DTE 3-10 (1) Brockton.xls

Worksheet: Brockton

1985-2004

#### Lawrence Division Historical Mains Data

ΙΑ mains (data source are DOT worksheets)

Year	Unprotected Bare Steel	Unprotected Coated Steel	Cathodically Protected Bare Steel	Cathodically Protected Coated Steel	Plastic	Cast & Wrought Iron	Total Miles of Main
4005	00	0	0	420	20	220	405
1985	86	9	0	139	22	229	485
1986	83	9	0	141	28	229	490
1987	74	9	0	146	36	228	493
1988	119	9	0	101	46	228	503
1989	106	4	0	118	50	226	504
1990	106	5	0	124	55	225	515
1991	106	3	0	126	57	225	517
1992	89	10	0	136	62	225	522
1993	89	8	0	142	70	222	531
1994	88	4	0	150	77	219	538
1995	89	5	0	146	84	217	541
1996	88	10	0	141	93	213	545
1997	87	5	0	146	101	211	550
1998	85	9	0	145	106	208	553
1999	86	7	0	149	115	206	563
2000	85	3	0	154	121	205	568
2001	84	3	0	154	124	204	569
2002	82	3	0	154	130	203	572
2003	72	3	0	163	135	203	576
2004	72	3	0	163	147	194	579

Filename: DTE 3-10 (1) Lawrence.xls

Worksheet: Lawrence

Springfield Division Historical Mains Data 1985-2004

SP mains (data source are DOT worksheets)

Year	Unprotected	Unprotected	Cathodically	Cathodically	Plastic	Cast &	Total
	Bare	Coated	Protected	Protected		Wrought	Miles of
	Steel	Steel	Bare Steel	Coated Steel		Iron	Main
1985	156	229	0	369	16	480	1250
1986	153	229	0	369	31	478	1260
1987	152	229	0	368	55	477	1281
1988	149	229	0	368	86	475	1307
1989	147	229	0	368	104	473	1321
1990	145	229	0	368	126	471	1339
1991	142	229	0	368	151	465	1355
1992	139	229	0	368	179	461	1376
1993	137	228	0	369	202	453	1389
1994	132	228	0	370	234	443	1407
1995	129	228	0	369	250	440	1416
1996	127	102	0	497	266	435	1427
1997	123	83	0	515	285	428	1434
1998	120	54	0	546	306	424	1450
1999	120	53	0	546	325	422	1466
2000	119	53	0	546	340	418	1476
2001	118	53	0	546	353	416	1486
2002	118	37	0	563	359	412	1489
2003	114	36	0	565	368	410	1493
2004	100	40	0	565	386	396	1487

Filename: DTE 3-10 (1) Springfield.xls

Worksheet: Springfield

## Mass Non- Discretionary Replacement Mains 1994 to 2004 3-10-2 By type of Pipe

	Thousands	

Brockton		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Plastic	Footage	37,870	29,290	68,629	38,217	70,857	48,933	43,761	42,188	32,295	45,151	88,743
	Dollars	\$1,350	\$1,070	\$2,403	\$1,280	\$2,594	\$1,468	\$1,617	\$2,082	\$1,736	\$1,963	\$4,914
Coated Steel	Footage	17,243	53,283	19,856	17,024	37,485	27,363	11,205	346	2,508	431	3,160
	Dollars	1,494	2,975	1,049	923	2,617	2,718	790	109	451	81	413
ALL	Footage	55,113	82,573	88,485	55,241	108,342	76,296	54,966	42,534	34,803	45,582	91,903
	Dollars	2,845	4,045	3,452	2,203	5,212	4,186	2,407	2,191	2,187	2,044	5,327
Springfield			22 24 7	22.440	40.000			22 510 1	0.4.0.50	4 5 4 0 7		22 0 50
Plastic	Footage	58,292	23,015	33,110	49,939	60,025	55,998	32,610	34,263	16,107	20,523	22,960
	Dollars	\$1,776	\$912	\$1,099	\$1,681	\$1,949	\$3,834	\$1,558	\$2,001	\$830	\$1,316	\$1,675
Coated Steel	Footogo	7,859	152	172	1,056	258	0	634	10,462	7,954	8,050	1,951
Coaled Sieer	Dollars	355	10	38	1,036	28	0	104	1,226	388	1,193	690
	Dollars	333	10	30	44	20	U	104	1,220	300	1,130	030
ALL	Footage	66,151	23,167	33,282	50,995	60,283	55,998	33,244	44,725	24,061	28,573	24,911
ALL	Dollars	2,131	922	1,137	1,725	1,977	3,834	1,662	3,226	1,218	2,510	2,365
	20		<u> </u>	.,	.,	.,	0,00.1	.,	0,220	.,		_,000
Lawrence												
Plastic	Footage	17,799	11,892	23,034	29,102	18,817	11,107	16,812	9,507	16,968	12,267	21,077
	Dollars	\$880	\$554	\$626	\$1,252	\$1,116	\$969	\$985	\$558	\$1,159	\$1,098	\$1,371
Coated Steel	Footage	1,445	229	224	9,212	5,374	2,196	50	426	1,000		184
	Dollars	53	12	15	744	471	396	21	149	174		80
		F										
ALL	Footage	19,244	12,121	23,258	38,314	24,191	13,303	16,862	9,933	17,968	12,267	21,261
	Dollars	934	566	640	1,996	1,587	1,365	1,006	707	1,333	1,098	1,451
Massachuse		112.061	64.107	104.770	117.050	140,600	116.020	02.102	05.050	65.270	77.041	122 700
Plastic	Footage	113,961	64,197	124,773	117,258	149,699	116,038	93,183	85,958	65,370	77,941	132,780
	Dollars	\$4,007	\$2,536	\$4,128	\$4,213	\$5,658	\$6,271	\$4,160	\$4,640	\$3,725	\$4,377	\$7,960
Coated Steel	Footage	26,547	53,664	20,252	27,292	43,117	29,559	11,889	11,234	11,462	8,481	5,295
Coaled Sieer	Dollars	\$1,902	\$2,997	\$1,101	\$1,711	\$3,117	\$3,114	\$914	\$1,483	\$1,013	\$1,275	\$1,183
	Dollars	Ψ1,502	Ψ2,001	ψι,ισι	Ψι,τιι	ψο, 117	ψυ, ι ι τ	ΨΟΙΤ	ψ1,700	ψ1,010	Ψ1,210	ψ1,100
ALL	Footage	140,508	117,861	145,025	144,550	192,816	145,597	105,072	97,192	76,832	86,422	138,075
	Dollars	5,909	5,532	5,230	5,924	8,775	9,385	5,074	6,124	4,738	5,652	9,142
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## Mass Discretionary New Mains 1994 to 2004 3-10-3 By type of Pipe

	Thousands

Brockton		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Plastic	Footage	208,011	191,196	155,686	177,067	150,223	122,274	132,343	119,066	57,119	83,910	100,495
	Dollars	\$1,470	\$1,367	\$1,010	\$1,344	\$1,213	\$1,064	\$1,023	\$1,192	\$526	\$737	\$707
Control Otest		2 202	206	006	6.450	400	2.504	00.700	1.000			<b>60</b>
Coated Steel		3,393	206	806	6,459	408	3,504	22,733	4,069			62 5
	Dollars	301	30	13	203	31	230	1,303	380			5
ALL	Footage	211,404	191,402	156,492	183,526	150,631	125,778	155,076	123,135	57,119	83,910	100,557
ALL	Dollars	1,771	1,397	1,024	1,547	1,243	1,294	2,326	1,572	526	737	712
	Donard	.,,,,	1,001	1,021	1,011	1,210	1,201	2,020	1,012	020		
Springfield												
Plastic	Footage	108,296	63,922	56,492	53,333	61,325	49,045	48,591	46,160	25,722	30,047	21,434
	Dollars	\$1,189	\$859	\$593	\$638	\$705	\$540	\$823	\$565	\$310	\$448	\$409
	•	······································									***************************************	
Coated Steel	Footage	0	628	17,777	995	6,674	0	0	943	2,585	979	0
	Dollars	0	34	58	85	256	0	0	1,924	232	67	0
	,			·····								
ALL	Footage	108,296	64,550	74,269	54,328	67,999	49,045	48,591	47,103	28,307	31,026	21,434
	Dollars	1,189	893	650	722	960	540	823	2,489	543	515	409
_												
Lawrence		04.174	24.505	26.600	21.655	10.610	41.007	26.250	14010	15.040	0.757	0.150
Plastic	Footage	24,174	24,797	26,680	21,655	18,619	41,227	26,350	14,910	15,242	8,757	9,150
	Dollars	\$284	\$396	\$290	\$230	\$211	\$469	\$382	\$168	\$326	\$131	\$88
Coated Steel	Footogo	3,708	7	4,513		6,154	1		5,985			
Coaled Sieer	Dollars	95	31	291		458	10	6	54		14	
	Dollars	93	31	231		430	10 (	0	J4			
ALL	Footage	27,882	24,804	31,193	21,655	24,773	41,227	26,350	20,895	15,242	8,757	9,150
	Dollars	379	426	581	230	669	479	388	223	326	145	88
	[											
Massachuse	tts											
Plastic	Footage	340,481	279,915	238,858	252,055	230,167	212,546	207,284	180,136	98,083	122,714	131,079
	Dollars	\$2,943	\$2,621	\$1,892	\$2,212	\$2,128	\$2,073	\$2,228	\$1,926	\$1,162	\$1,316	\$1,203
<b>Coated Steel</b>	Footage	7,101	841	23,096	7,454	13,236	3,504	22,733	10,997	2,585	979	62
	Dollars	\$396	\$95	\$362	\$287	\$745	\$239	\$1,309	\$2,359	\$232	\$80	\$5
ALL	Footage	347,582	280,756	261,954	259,509	243,403	216,050	230,017	191,133	100,668	123,693	131,141
	Dollars	3,339	2,716	2,254	2,499	2,873	2,312	3,537	4,284	1,394	1,397	1,208

# RESPONSE OF BAY STATE GAS COMPANY TO THE THIRD SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager Bay State Gas Company

- DTE-3-17 Refer to Exh. BSG/DGC-5. Please provide supporting documentation and workpapers used in determining the following:
  - 1) the estimated average direct cost per unit; and
  - 2) the 31 percent capital overhead factor.

#### Response:

- Please see Table DTE-3-17 (a) comparing average direct cost per unit used for Steel Infrastructure Replacement Program ("SIRP") to 2004 actual average costs. The SIRP estimated costs are 15 to 17% lower than the 2004 actual average costs based on Bay State Gas's expectation for each respective cost category that contractor pricing will be lower on the SIRP.
- 2) Table DTE-3-17 (b) illustrates the calculation of the average overhead rate compared to total direct cost for applicable work expected in 2005. Applicable work is defined as being those capital projects that will involve Company labor (all construction and meter work), which is the basis for overhead allocation, with exception of Stores. The rate is 31% and that is what Bay State estimates will be applied to booked SIRP related plant work in 2005 and beyond.

	Table DTE-3-17 (a)										
	Steel Infrastructure Replacement Program ("SIRP") Unit Costs Projection										
		Actual 2004 Direct Cost	Effective Discount \$ per Unit	Effective Discount % per Unit	Average Projected SIRP						
Main Replacement	Footage Cost per Unit Dollars	124,372 \$72.26 \$8,986,940	\$12.26	17%	\$60.00						
Service Replacement (Residential & Commercial / Industrial)	Units Cost per Unit Dollars	2,264 \$1,583.20 \$3,584,364	\$273.20	17%	\$1,310.00						

	Table DTE-3-17 (a) Steel Infrastructure Replacement Program ("SIRP") Unit Costs Projection									
Service Tieovers	Units Cost per Unit	616 \$1,113.98	\$167.98	15%	\$946.00					
	Dollars	\$686,210	Ψ107.70	10 / 0	φ					
Meter	Units	664								
Relocates	Cost per Unit	\$130.70	\$18.70	14%	\$112.00					
	Dollars	\$86,784								

### Table DTE-3-17 (b) Steel Infrastructure Replacement Program ("SIRP") Overhead Rate Estimate

Direct Capital Costs	2005 Estimated Capital Costs
Growth capital costs	\$ 8,000,000
Meter capital costs	\$ 525,000
Replacement capital costs	<u>\$26,246,000</u>
(1) Total (overhead applicable)	<u>\$34,771,000</u>
IT capital costs	\$ 2,124,000
Rentals capital costs	\$ 2,300,000
Meter purchase costs	\$ 1,440,000
Other projects (facilities, etc)	\$ 360,000
System operation costs	\$ 1,175,000
<b>Total Direct Capital Cost</b>	<u>\$42,170,000</u>

### **Overhead Capital Costs**

Fringe benefits, stores & fleet \$6,785,581 Indirect supervision & non-productive \$3,914,419

(2) Total Overhead **\$10,700,000** 

Total Capital (Direct & Overhead) \$52,870,000

Overhead as percent of applicable direct costs

(2) / (1) = 31%

# RESPONSE OF BAY STATE GAS COMPANY TO THE THIRD SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager Bay State Gas Company

DTE-3-19 For each of the projects listed in Exh. BSG/DGC-8, please indicate the

size and type of main that was installed and the size and type of main that

was replaced.

Response: Please see Table DTE-3-19 for the Requested Information.

Table DTE-3-19

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh. BSG/DGC-8	Year	Location	INSTALLED	REPLACED	Project ID
List			Pipe Size &	Pipe Size &	
Number			Pipe Type	Pipe Type	
1	2004	Taunton / Short Street	6.0" PP	2.0" BS	B0455072
2	2004	Attleboro / County	2.0" PP	6.0" CI	B04D5071
		Street	6.0" PP	6.0" WI	
				6.0" BS	
3	2004	Attleboro /	6.0" PP	6.0" BS	B04D5068
		Thatcher Street			
4	2004	Franklin/ West	6.0" CS	6.0" CS	B04D5054
		Central Street			
5	2004	Stoughton / Brock	6.0" PP	6.0" BS	B04D5018
		Street	6.0" PP		
6	2003	Easthampton /	4.0" PP	4.0" BS	S03D1082
		West Street	2.0" PP		
7	2003	W. Springfield /	8.0" CS	6.0" BS	S03D1053
		West Side Uprate	6.0" PP		
			2.0" PP		
8	2003	Northampton /	2.0" PP	2.0" BS	S03D1016
		Leeds Uprate	4.0" PP	3.0" BS	
9	2003	Lawrence /	6.0" PP	8.0" CI	LO3D0014
		Broadway Street	8.0" PP	12.0" CI	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8 List			Pipe Size &	Pipe Size &	3
Number			Pipe Type	Pipe Type	
10	2003	Sharon / S. Main	8.0" PP	3.0" BS	B03D5071
	2000	Street	4.0" PP	2.0 22	20020071
11	2003	Taunton /	8.0" PP	6.0" CI	B03D5041
		Somerset Ave.	4.0" PP	4.0" WI	
12	2002	Ludlow / Inter 20"	20.0" CS		
		MMWEC			
13	2002	Springfield / Main	12.0" CS	10.0" CI	S02D1018
		Street	4.0" PP		
			10.0" CS		
14	2002	W. Springfield /	6.0" PP	6.0" BS	S02D1008
		Memorial Ave.			
15	2002	North Andover /	6.0" PP	6.0" BS	L2002D0046
		Johnson Street			
16	2002	Sharon / Canton	12.0" CS	2.0" CS	B02D5022
		Street	10.0" CS		
17	2002	Holbrook / Union	6.0" PP	6.0" BS	B02D5015
		Street	2.0" PP	2.0" BS	
10	2002	N / F	4 0" PP	1.5" BS	D00D 5010
18	2002	Norton / Freeman Street	4.0" PP	3.0" CS	B02D5012
19	2001	Chicopee /	6.0" PP	4.0" CI	S01D1030
		Broadway Street	4.0" PP	4.0" PP	
				4.0" CI	
				3.0" BS	
				6.0" CI	
				3.0" CI	
20	2001	W. Springfield /	8.0" PP	6.0" BS	S01D1025
		Memorial Ave.	4.0" PP	6.0" CI	
			2.0" PP	4.0" BS	
	2001	ar :	4.09.00	2.0" BS	G01D1010
21	2001	Chicopee /	4.0" PP	6.0" CI	S01D1019
		Chicopee Street	1.0" PP	4.0" CI	
			1.3" PP	4.0" WS	
22	2001	Lawrance /	8.0" PP	1.3" BS 6.0" CI	I 2001D0001
44	2001	Lawrence / Broadway Street	12.0" CS	12.0" BS	L2001D0001
23	2001	Foxboro / Baker	4.0" PP	4.0" BS	B01D5038
23	2001	Street	2.0" PP	2.0" BS	סטטעוטע
24	2001	Marshfield / Ferry	4.0" PP	3.0" BS	B01D5010
2-	2001	Street	7.0 11	J.U DS	0102010
25	2001	Canton / High	2.0" PP	2.0" BS	B01D5008
23	2001	Street	2.0 11	1.3" BS	D01D3000

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8 List			Pipe Size &	Pipe Size &	3
Number			Pipe Type	Pipe Type	
26	2000	Northampton /	4.0" PP	6.0" BS	SOOD1043
	2000	Ryan Road		0.0 25	50021015
27	2000	W. Springfield /	4.0" PP	6.0" CS	S00D1001
		Riverdale Street	2.0" PP		
28	2000	Andover / Phillips	6.0" PP	4.0" CI	L2000D0012
		Street			
29	2000	Lawrence / Exeter	8.0" PP	4.0" CI	L2000D0005
		Street			
30	2000	Hanson / Brook	12.0" CS	8.0" BS	B00D5029
		Street			
31	2000	Taunton / Floral	6.0" PP	4.0" CI	B00D5020
		Street	4.0" PP		
32	1999	Easthampton /	4.0" PP	4.0" BS	S99D1053
		Plain Street	4.0" PP	2.0" PP	
	1000		2.0" PP	4 011 67	20021011
33	1999	South Hadley /	2.0" PP	4.0" CI	S99D1014
		Falls Project	4.0" PP	6.0" CI	
24	1000	C 41 II 11 /	6.0" PP	4.02 D.C	G00D1011
34	1999	South Hadley /	6.0" PP	4.0" BS	S99D1011
		Granby Road	2.0" PP	2.0" BS 2.0" WS	
35	1999	North Andover /	6.0" PP	6.0" CI	L99D0074
33	1999	Mass. Ave	0.0 FF	0.0 CI	L99D0074
36	1999	Lawrence / Thissel	8.0" PP	2.0" BS	L99D0032
30	1777	Street	0.0 11	4.0" CI	L))D0032
		Street		6.0" CI	
37	1999	Attleboro / Pine	2.0" PP	3.0" WI	B99D5058
		Street	8.0" CS	2.0" WI	
				8.0" BS	
38	1999	Taunton / Dexter	2.0" PP	4.0" CI	B99D5056
		Ave.	6.0" PP	8.0" BS	
			8.0" CS		
39	1999	Walpole / Elm	8.0" CS	4.0" BS	B99D5040
		Street	2.0" PP	2.0" CS	
				2.0" PP	
40	1999	Avon / W. Main	4.0" PP	4.0" BS	B99D5033
		Street	2.0" PP	4.0" CS	
				2.0" BS	
4.4	1000	0 1 1 2 5	2 AM 70-	2.0" BS	D005 707
41	1999	Seekonk / Fall	6.0" PP	4.0" BS	B99D5032
		River Ave.	2.0" PP	2.0" BS	
				0.8" BS	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh. BSG/DGC-8	Year	Location	INSTALLED	REPLACED	Project ID
List			Pipe Size &	Pipe Size &	
Number			Pipe Type	Pipe Type	
42	1999	Attleboro / Knight	12.0" CS	4.0" BS	B99D5029
		Ave.	2.0" PP	2.0" BS	
43	1999	Seekonk /	2.0" PP	2.0" CS	B99D5020
		Newman Ave.	8.0" CS	2.0" BS	
				4.0" BS	
				4.0" CS	
44	1999	Hanson / Oldham	12.0" CS	8.0" BS	B99D5019
		Street	2.0" PP	2.0" CS	
45	1999	Chicopee / Grattan	2.0" PP	2.5" BS	S98D1041
		Street			
46	1999	South Hadley /	2.0" PP	2.0" CI	S98D1040
		Falls Project	4.0" PP	4.0" CI	
47	1998	Northampton /	2.0" PP	2.0" CI	S98D1010
		West Street	6.0" PP	4.0" CI	
				6.0" CI	
48	1998	Chicopee / Granby Road	4.0" PP	4.0" BS	S98D1007
49	1998	Lawrence / Ferry Street	8.0" PP	4.0" CI	L98D0068
50	1998	Methuen / Pleasant Street	8.0" PP	4.0" CI	L98D0023
51	1998	Pembroke /	12.0" CS	8.0" BS	B98D5065
		Oldham Street	8.0" CS	4.0" BS	
			4.0" CS	2.0" PP	
			2.0" CS		
52	1998	Holbrook / South	6.0" PP	6.0" BS	B98D5062
		Franklin Street	2.0" PP	1.3" CS	
			4.0" PP	1.5" BS	
				2.0" BS	
				3.0" BS	
53	1998	Raynham / New	6.0 "PP		B98D5059
		Cape Highway	8.0" CS		
54	1998	Brockton / Menlo	6.0" PP	6.0" CI	B98D5056
		Street	4.0" PP	4.0" CI	
	1050		200	2.0" WI	D005 - 22 :
55	1998	Seekonk /	6.0" PP	6.0" CI	B98D5034
		Newman Ave.	8.0" PP	4.0" CI	
	1050		<u> </u>	2.0" WI	D005 5055
56	1998	Holbrook / Union	2.0" PP	2.0" BS	B98D5032
		Street	4.0" PP	1.3" BS	
			6.0" PP	4.0" BS	
				6.0" BS	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8 List			Pipe Size &	Pipe Size &	
Number			Pipe Type	Pipe Type	
				6.0" WI	
57	1998	Franklin / Lincoln	8.0" CS	6.0" BS	B98D5023
		& Main Street	4.0" PP	4.0" CS	
			2.0" PP	2.0" BS	
			12.0" CS	12.0" CS	
				2.0" CS	
				2.0" PP	
				3.0" BS	
58	1998	Taunton / Cooper	2.0" PP	6.0" CI	B98D5021
		Square	4.0" PP	4.0" CI	
			6.0" PP	2.0" WI	
				2.0" BS	
				1.3" WI	
59	1998	Franklin / King	2.0" PP	4.0" CI	B98D5021
		Street	4.0" PP	6.0" CI	
			6.0" PP	2.0" BS	
				2.0" WI	
				1.25" WI	
60	1998	Brockton / Warren	4.0" PP	2.5" WI	B98D5006
		Ave.	6.0" PP	6.0" CI	
			8.0" CS	4.0" CI	
				8.0" CI	
				3.0" WI	
				4.0" WI	
				8.0" CS	
				6.0" WI	
61	1997	Springfield /	6.0" PP	6.0" CI	S97D1006
		Boston Road			
62	1997	Easthampton /	4.0" PP	4.0" BS	S97D1003
		Main Street	2.0" PP	3.0" CI	
				2.0" WI	
63	1997	Easthampton /	4.0" PP	3.0" CI	S97D1001
		Holyoke Street	6.0" PP	4.0" CI	
64	1997	Lawrence /	6.0" PP	4.0" CI	L97D0040
		Arlington Street			
65	1997	Methuen /	4.0" PP	4.0" CI	L97D0012
		Oakland Ave.		6.0" CI	
66	1997	Lawrence /	12.0" CS	8.0" CI	L97D0011
		Broadway &		12.0" BS	
		Methuen			
67	1997	Easton / Main	8.0" CS	6.0" BS	B97D5086
		Street	2.0" PP	3.0" CS	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8 List			Pipe Size &	Pipe Size &	
Number			Pipe Type	Pipe Type	
			2.0" CS	4.0" BS	
				2.0" CS	
				2.0" BS	
68	1997	Medway / High	12.0" CS	6.0" BS	B97D5020
		Street	4.0" PP	4.0" BS	
			6.0" PP	6.0" CS	
			2.0" CS	3.0" BS	
			2.0" PP	2.0" CS	
				2.0" PP	
				6.0" PP	
69	1996	Methuen / Pelham Street	8.0" PP	6.0" CI	L96D0034
70	1996	Taunton /	2.0" PP	6.0" WI	B96D5060
		Williams Street		6.0" BS	
				2.0" PP	
71	1996	Hanover / Main	6.0" PP	2.0" BS	B96D5059
		Street	6.0" CS	2.0" CS	
72	1996	Brockton / Sawtell	8.0" CS	6.0" BS	B96D5031
		Ave.	2.0" PP	4.0" WI	
				6.0" CI	
				2.0" WI	
				2.0" BS	
				2.0" CS	
				2.0" PP	
				4.0" CI	
				1.3" BS	
73	1996	Brockton /	6.0" PP	6.0" CI	B96D5027
		Belmont Street	4.0" PP	4.0" CI	
			2.0" PP	4.0" WI	
				3.0" WI	
				4.0" CS	
				2.0" WI	
				4.0" BS	
				2.0" WI	
				12.0" CI	
				8.0" CI	
				3.0" BS	
				2.0" CS	
74	1996	Brockton / Main &	4.0" PP	8.0" CI	B96D5009
-		Pleasant Street	8.0" PP	6.0" CI	
			1.3" PP	4.0" CI	
				12.0" CI	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8			Pipe Size &	Pipe Size &	
List Number			Pipe Type	Pipe Type	
Number			1 71	6.0" CS	
				4.0" CS	
				4.0" PP	
75	1996	Avon / E. High	2.0" CS	6.0" BS	B96D5004
75	1990	Avon / E. High			D90D3004
<b></b>	1005	Street	8.0" CS 6.0" PP	2.0" CS	CO5D1025
76	1995	Springfield /	0.0 PP	4.0" CI	S95D1025
	1007	Belmont Ave.	6 0" DD	c on or	G05D1005
77	1995	Ludlow / East	6.0" PP	6.0" CI	S95D1005
=0	1007	Street	4.011.70	4.011.75.0	G0.5D.1000
<b>78</b>	1995	Springfield /	4.0" PP	4.0" BS	S95D1002
		Parker Street	6.0" PP	6.0" CI	
<b>79</b>	1995	Walpole / Main	2.0" PP	2.0" CS	B95D5060
		Street	6.0" PP	4.0" BS	
			4.0" PP	4.0" BS	
80	1995	Taunton / Hart	8.0" CS	6.0" BS	B95D5059
		Street	2.0" PP	2.0" PP	
			4.0" PP	4.0" PP	
81	1995	Taunton / Short	2.0" PP	2.0" BS	B95D5048
		Street	4.0" PP	4.0" CS	
			8.0" CS	8.0" BS	
				2.0" PP	
82	1995	Holbrook / Quincy	2.0" PP	1.5" BS	B95D5043
		Street	1.3" PP	2.0" CS	
			8.0" CS	6.0" BS	
83	1995	Medway / Main	12.0" CS	6.0" BS	B95D5008
		Street	6.0" PP	4.0" BS	
			4.0" PP	2.0" BS	
			2.0" PP		
84	1995	Brockton / MBTA	16.0" CS	12.0" CS	B95C0004
		Relocation	12.0" CS	8.0" CS	
			6.0" CS	8.0" CI	
			4.0" CS	6.0" CI	
85	1995	Brockton / Elliot	16.0" CS	12.0" CS	B95C0003
		Street	1.0" CS	6.0" CI	
				2.0" WI	
				1.3" WI	
86	1995	Brockton / MBTA	2.0" PP	16.0" CS	B95C0002
		Bridge	16.0" CS	3.0" CS	
		_	24.0" casing	24.0" casing	
				16.0" CS	
87	1995	Brockton /	16.0" CS	8.0" CI	B95C0001
		Intervale Street		6.0" CI	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh.	Year	Location	INSTALLED	REPLACED	Project ID
BSG/DGC-8			Pipe Size &	Pipe Size &	
List Number			Pipe Type	Pipe Type	
Tullibei				4.0" CI	
88	1994	Springfield / St.	6.0" PP	4.0" CI	St. James
		James St.			Street
89	1994	Randolph / North	2.0" PP	3.0" BS	North Main
		Main	6.0" PP	4.0" PP	
				1.5" BS	
90	1994	Lawrence / Brookfield	12.0" CS	8.0" BS	Brookfield
91	1994	Lawrence /	4.0" PP	4.0" CI	L94D0003
		Andover Street	8.0" PP	8.0" CI	
92	1994	Wrentham / East	8.0" CS	6.0" BS	B94D5052
		Street	2.0" PP	2.0" BS	
			6.0" CS	3.0" CS	
			4.0" PP	6.0" BS	
			6.0" PP		
93	1994	Franklin / East	8.0" CS	6.0" BS	B94D5023
		Central Street	2.0" PP	2.0" BS	
94	1994	Wrentham / East Street	8.0" CS	6.0" BS	B94D5020
95	1994	Canton / Pleasant	8.0" CS	2.0" CS	B94D5008
		Street	2.0" PP	1.3" BS	
				2.0" BS	
				1.5" BS	
96	1994	Brockton /	8.0" CS	6.0" CI	B94D5005
		Copeland Street	12.0" CS	8.0" CI	
			2.0" PP	6.0" BS	
				3.0" CS	
07	1994	Drookton /	16 0200	3.0" BS	D04C0002
97	1994	Brockton / Commercial Yard	16.0"CS	12.0" CS	B94C0003
98	1994	Seekonk / Arcade	8.0" CS	4.0" BS	B94C0002
		Ave.	2.0" PP	2.0" BS	
			4.0" CS	4.0" BS	
99	1994	Brockton & Avon	12.0" CS	4.0" CS	B94C0001
		/ MBTA	8.0" CS	6.0" CS	
		Relocation		2.0" BS	
				4.0" BS	
				6.0" BS	
				4.0" CI	
				6.0"CI	
			]	8.0" CI	

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Exh. BSG/DGC-8	Year	Location	INSTALLED	REPLACED	Project ID
List			Pipe Size &	Pipe Size &	
Number			Pipe Type	Pipe Type	
100	1993	Chicopee /	2.0" PP	8.0" BS	Memorial
		Memorial Ave.	4.0" PP		Ave.
			6.0" PP		
			10.0" CS		
101	1993	Seekonk / Taunton	8.0" CS	4.0" BS	Taunton
		Street		6.0" CS	Street
				2.0" BS	
				4.0" CS	
102	1993	Brockton / North	8.0" CS	2.0" BS	North Carey
		Carey	4.0" PP	6.0" BS	-
103	1993	Andover / Holt	4.0" PP	4.0" CI	Holt Road
		Road		4.0" CS	
104	1993	Brockton / Dover	12.0" CS	6.0" BS	Dover Street
		Street	2.0" PP	4.0" CI	
				1.5" BS	
105	1992	Brockton / Torrey	8.0" CS	6.0" BS	Torrey Street
		Street	2.0" PP	6.0" CI	
				4.0" CI	
106	1992	Marshfield /	8.0" CS	3.0" BS	Ocean Street
		Ocean Street	4.0" PP	3.0" CS	
			2.0" PP	2.0" CS	
107	1992	Hanson / Maguan	4.0" PP	2.0" BS	Maguan
		Street	8.0" PP	4.0" BS	Street
			2.0" PP	8.0" BS	

# RESPONSE OF BAY STATE GAS COMPANY TO THE FIFTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Stephen H. Bryant, President

DTE-15-55 Refer to Exh. BSG/JES-1, at 23-24. Please provide all documents,

circulars, or RFPs for the competitive bidding process used for all outside

services solicited with respect to the conduct of the rate case.

Response:

The Company undertook an extensive evaluation and selection process to support its 2005 base rate case filing with qualified and competitively priced outside consultants in the following areas: (1) cost of capital, (2) performance based ratemaking, (3) cost studies, including cost of service, marginal cost, and simplified market based allocation cost studies, (4) depreciation, (5) steel infrastructure replacement (also referred to as distribution infrastructure replacement or "DIR" in the RFP documents); (6) legal, and (7) building cost allocation analysis.

To facilitate this process, Bay State issued a series of RFPs to a list of qualified bidders in each of the above-described disciplines using industry contacts, previous experience, and internet searches. A number of vendors responded to each respective RFP, and certain vendors responded to multiple RFPs.

The Company subsequently reviewed and evaluated each proposal to narrow the list to a few leading vendors in each discipline. Then, following further internal discussions, personal and telephone interviews, a qualitative and quantitative matrix was completed, which weighted certain competencies. Each matrix was then reviewed, and the selection of vendors was made based on the overall score.

Below is a list of attachments, which are voluminous and will be filed as soon as they can be reproduced, that include copies of all RFPs, responses to RFPs, and other evaluation materials generated as part of this process. The materials are organized by discipline, and then within each discipline by vendor or subject as listed.

Attachment DTE-15-55 (a) – Cost of Capital RFP Materials

- COC-001 Moul & Associates
- COC-002 FINANCO, Inc.
- COC-003 AUS Consultants
- COC-004 The Brattle Group
- COC-005 RJ Rudden Associates

- COC-006 Concentric Energy Advisers
- Evaluation Materials Various

### Attachment DTE-15-55 (b) - Performance Based Ratemaking

- PBR-001 National Economic Research Associates
- PBR-002 Analysis Group
- PBR-003 Navigant Consulting
- PBR-004 Cambridge Energy Research Associates
- PBR-005 Pacific Economics Group
- PBR-006 Concentric Energy Advisors
- PBR-007 Shaw Stone & Webster Management Consultants
- Evaluation Materials Various

### Attachment DTE-15-55 (c) - Cost of Service / Marginal Cost Studies

- COSS/MCS-001 Navigant Consulting
- COSS/MCS-002 Management Applications Consulting
- COSS/MCS-003 RJ Rudden Associates
- COSS/MCS-004 LaCapra Associates
- COSS/MCS-005 Concentric Energy Advisors
- COSS/MCS-006 Shaw Stone & Webster Management Consultants
- Evaluation Materials Various

#### Attachment DTE-15-55 (d) - Depreciation Study

- DEP-001 AUS Consulting
- DEP-002 Management Applications Consulting
- DEP-003 RJ Rudden Associates
- DEP-004 Shaw Stone & Webster Management Consultants
- DEP-005 Gannett Flemming
- DEP-006 Concentric Energy Advisors
- Evaluation Materials Various

#### Attachment DTE-15-55 (e) – Distribution Infrastructure Replacement

- DIR-001 Concentric Energy Advisors
- DIR-002 Morris Loflin & Company
- DIR-003 RJ Rudden Associates
- DIR-004 Navigant Consulting
- Evaluation Materials Various

### Attachment DTE-15-55 (f) – Building Cost Allocation Study<sup>1</sup>

- Coler & Colantonio
- I.C. Solutions Ltd
- Newbury Design Associates, Inc.

<sup>&</sup>lt;sup>1</sup> No formal RFP was issued for this discipline, but several bids were obtained per a verbal request. The three proposals that Bay State Gas received are attached.

# RESPONSE OF BAY STATE GAS COMPANY TO THE FIFTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Stephen H. Bryant, President

DTE-15-56 Refer to Exh. BSG/JES-1, at 23-24. Please indicate those outside services associated with the rate case that were not competitively bid.

Response:

Please see below a list of third party vendors hired by Bay State Gas to support the Company's base rate case filing, which were not competitively bid. In general, the Company did not issue RFPs for the services provided by these particular vendors as they were determined to have unique skills and knowledge of Bay State's operations (e.g. former employees), were already working for Bay State and / or NiSource on other projects, were pre-judged to be market competitive (e.g., temporary staffing), or the estimated costs did not justify going through the RFP process. Also included is a brief description by each vendor as to why the Company did not issue an RFP for this particular service.

- Labor and Benefit Analyses (Hewitt) already under contract with NiSource to provide human resource services.
- Paul LaShoto (Historic Capital Expenditures) former employee with the necessary institutional knowledge and generally viewed as price competitive.
- Blue Cod Technologies (Historic Capital Expenditures) former employee with the necessary institutional knowledge, and generally viewed as price competitive.
- The META Group (Historic Capital Expenditures) already under contract with NiSource, was generally viewed as price competitive, and possessed area of expertise needed to complete assignment.
- Coler & Colantonio (Building Cost Allocation Study) although the Company did not issue a formal RFP for this service, it did receive three bids. The selected vendor was generally viewed as price competitive and a former employee with the necessary institutional knowledge.
- Corporate Renaissance, Inc. (Service Quality Audit and Documentation) – previously provided consulting services to Bay State Gas, and was generally viewed as price competitive.

- Baryenbruch and Company (NCSC Market Comparison) already under contract with NiSource, and was generally viewed as price competitive and possessed area of expertise needed to complete assignment.
- Dan Yardley (Tariff Development and Review) has provided extensive consulting services with Bay State Gas, and was generally viewed as price competitive.
- Suburban Staffing Inc. (Temporary Help) under contract to provide temporary services with Bay State Gas, and was generally viewed as price competitive.
- Adecco (Temporary Help) under contract to provide temporary services with Bay State Gas, and was generally viewed as price competitive.
- Miscellaneous Expense (Federal Express) –generally viewed as price competitive, provides quality service and is convenient.
- Miscellaneous Expense (Copier and Supplies) –generally viewed as price competitive, provides quality services and is convenient.

# RESPONSE OF BAY STATE GAS COMPANY TO THE FIFTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9 2005

Responsible: John E. Skirtich, Consultant (Revenue Requirements)

DTE-15-57 Refer to Exh. BSG/JES-1, Sch. JES-6, at 8. Please provide invoices for

every expense that has been incurred to date. As part of this response, please provide a schedule showing expense totals to date for each of the

categories used in Exh. BSG/JES-1, Sch. JES-6, at 8.

Response: Please see the Company's response to DTE-15-58 filed on June 29, 2005

and supplemented on July 11 for copies of all requested invoices. The Company notes that all legal invoices are being filed under separate

cover as part of its Motion For Protective Treatment.

# RESPONSE OF BAY STATE GAS COMPANY TO THE SIXTEENTH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

DTE-16-29 Refer to Exh. BSG/DGC-1, at 52. Please provide all supporting

documentation for what the Company characterized as "the unusual and excessive construction requirements and demands" by the Department of Public Works and Turnpike Authority. Provide all letters, notices, and communications to from these two Massachusetts state agencies.

Response: Attachment DTE-16-29 is an internal Memorandum ("MASSPOWER

Project Budget Variance" dated 12/4/1992) that lists some of the practices that the Company viewed as "the unusual and excessive construction

requirements and demands".

The Company no longer retains the letters, notices, and communications to and from the Department of Public Works and Turnpike Authority relating to the 1992 construction of the MASSPOWER and Monson &

Palmer lines.

#### OFFICE MEMORANDUM

DATE:

December 4, 1992

SUBJECT:

MASSPOWER PROJECT BUDGET VARIANCE

FROM:

G.W. Robinson

TO:

C.G. Setian

The MassPower pipeline construction project is nearing completion with test gas expected to be flowing into MassPower's cogeneration turbines on February 18, 1993. The 18.6 mile pipeline is completely installed and has been pressure tested. The principal project tasks remaining are, 1) the completion of the metering ("take") station in Monson, 2) the installation of the metering equipment at MassPower, and 3) the installation of the computer monitoring and emergency venting systems.

Through the end of FY '92 the project is considerably over budget though a strict reading of the numbers is somewhat misleading because some expenditures budgeted for FY '93 actually occurred in FY '92. It appears that the project viewed as a whole will come in at about \$3.5 million (21%) over the \$17,163,000 budget based on the attached schedules. This variance consists of, 1) items never budgeted for as part of the project (\$1,764,800), and 2) items whose actual costs exceeded amounts budgeted (\$1,809,200). Virtually the entire variance is the result of unusual and, in our view, excessive construction techniques and materials demands imposed by the State (DPW and Turnpike Authority) and local municipal officials. For example...

- 1. The State demanded much wider trenching than normal practice.
- 2. The State required our using special backfill materials which meant that we also had to haul away/dispose of the spoil originally removed from the trench.
- 3. The wider trench resulted in a wider asphalt patch.
- 4. After we had already started the project, the State refused to permit us to employ the normal procedure of putting down a base coat of asphalt followed by a finish layer of asphalt installed after a settling period. The "least cost" option acceptable to the State was to install a temporary patch which, at the later date, had to be completely removed and replaced with a permanent <u>much thicker</u> than normal asphalt patch.
- 5. The State required saw cutting of the roadway surface for both the original trenching and the subsequent re-asphalting of the roadway.

MASSPOWER PROJECT BUDGET VARIANCE Page 2

It should be noted that more than 10 miles of the 18.6 mile project are located in State highways. In Monson, Palmer and Ludlow, highway, water and sewer officials placed unusually stringent demands on the Company's construction work.

Since the roadway construction portion of the MassPower project has been completed, the types of overages cited in the attached schedule\* are now behind us. We anticipate that the monies budgeted in FY'93 will be sufficient to complete the project.

NOTE: In reading the attached schedule, you will see some duplicate items such as saw cutting and gravel. Such items are actually different types of saw cutting, gravel, etc.

It should also be noted that through the end of FY '92, \$533,000 had been charged to AFUDC. The original project authorization did not include AFUDC.

GWR/alg Attachment

### "MAJOR" MASSPOWER PROJECT BUDGET VARIANCES

### Items NOT budgeted for as part of the project:

· · · · · · · · · · · · · · · · · · ·			
1 NB.	Temporary paving	\$ 567,000	
2 NB.	Specially processed gravel	449,000	
3 NB.	Saw cutting	215,000	
4 NB.	Trucking away of spoil	196,000	
5 NB.	Segregating/disposal of dirt	160,000	
6 NB.	Asphalt	109,000	
7 NB.	Curb replacement	24,000	
8 NB.	Replacement concrete	16,000	
9 NB.	Tree trimming	16,200	
10 NB.	Scott air-packs (Monson F.D.)	12,600	
Total		\$1,764,800	

### Items <u>UNDER</u> budgeted:

ITEM	SHORTFALL	BUDGET	ACTUAL
1 UB. Permanent asphalt paving	\$1,500,000	\$ 600,000	\$2,100,000
2 UB. Saw cutting	213,000	216,000	429,000
3 UB. BSG labor *	141,000	116,000	257,000
4 UB. Gravel	65,000	37,000	102,000
5 UB. Segregating/disposal of dirt	45,000	12,000	57,000
6 UB. Extra depth excavating	37,000	32,000	69,000
7 UB. Topsoil separation	28,000	12,000	40,000
8 UB. Asphalt-base coat	28,000	24,000	52,000
9 UB. Monson metering station	25,000	150,000	- 175,000
10 UB. Blasting/rock removal	25,000	69,000	94,000
11 UB. Filter fencing	24,000	25,000	49,000
12 UB. Trench boxing	23,200	12,800	36,000
13 UB. Trench bracing	23,000	67,000	90,000
14 UB. Mulch	11,500	7,500	19,000
15 UB. Asphalt berms	11,000	9,000	20,000
16 UB. Legal fees	11,000	50,000	61,000
Totals	\$2,210,700	\$1,439,300	\$3,650,000

<sup>\*</sup> In addition to the shortfall in budgeted direct BSG labor, there were "indirect" BSG labor charges of \$288,000.

### Items <u>OVER</u> budgeted:

ITEM	EXCESS	BUDGET	ACTUAL
1 OB. Asphalt	\$142,000	\$ 364,000	\$222,000
2 OB. Loam/seed	138,000	275,000	137,000
3 OB. Long-side stubs	49,000	65,000	16,000
4 OB. Hay bales	30,000	40,000	10,000
5 OB. Bell holes	17,500	37,500	20,000
6 OB. Weld x-raying	13,000	350,000	337,000
7 OB. Dirt segregating/disposal	12,000	182,000	170,000
Totals	\$401,500	\$1,313,500	· \$912,000

Net deficiency of budgeted items Cost of unbudgeted items	\$ 1,809,200 
	\$ 3,574,000
Original authorization for FY '92 & '93	\$15,530,000
(Actual) preliminary engineering prior to FY '92	1,100,000
(Actual) AFUDC charges in FY '92	533,000
	\$17,163,000

Over budget total of \$3,574,000 equals 21%

# RESPONSE OF BAY STATE GAS COMPANY TO THE TWENTIETH SET OF INFORMATION REQUESTS FROM THE D.T.E. D. T. E. 05-27

Date: July 9, 2005

Responsible: Danny G. Cote, General Manager

DTE-20-3 Please provide the number of odor calls received by the Company for the

years 1985 through present, broken down by (1) attributable to corrosion,

and (2) attributable to all other causes.

Response: In general, the majority of odor calls received by the Company are

generated following a call into the dedicated Leak Line. These orders are dispatched to a technician for investigation. The cause of leak is not captured on these orders. The number of odor orders generated by the Company for the years 1997 through present is detailed in Attachment

DTE 20-3. Odor order volumes are not available prior to 1997.

However, a small number of odor calls are received directly in each operating center. When this occurs, Distribution crews are dispatched to the site to investigate the odor complaint. In these cases, cause of leak is captured as part of the workorder completion process. The number of odor calls received by the Company for the years 1995 through present, broken down by (1) attributable to corrosion, and (2) attributable to all other causes in detailed in the attachment DTE 20-3.

**BAY STATE GAS COMPANY Data Request: DTE-20-3** 

### Total calls generated from Gas Leak Line

Year	Total calls
1997	16497
1998	18295
1999	19511
2000	19018
2001	18230
2002	18061
2003	23020
2004	18973
2005	8135

#### **Total Calls from Other Sources**

ota. oao		<b>-</b>		
Year	Total calls	Corrosion	Other	Pending
1995	194	122	68	4
1996	223	126	87	10
1997	186	88	88	10
1998	288	131	147	10
1999	277	116	140	21
2000	342	167	155	20
2001	308	167	120	21
2002	295	125	154	16
2003	574	260	268	46
2004	798	353	399	46
2005	417	162	129	126